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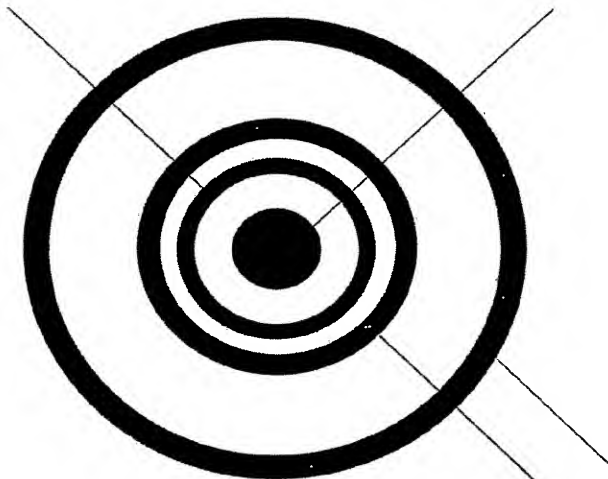
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(54) Title: METHOD AND APPARATUS FOR MEASURING GLUCOSE IN BODY FLUIDS USING SUB-DERMAL BODY TISSUE IMPEDANCE MEASUREMENTS

Guard electrode

Sensing electrode



Injection electrode

(57) Abstract: A method and an apparatus for measuring glucose level in the body fluid of a subject, typically blood glucose level, by measuring impedance of a body tissue, with two pairs of electrodes, two electrodes for injecting current into a body tissue and two electrodes for detecting the ensuing voltage of the body tissue. The body tissue is typically a sub-dermal or sub-cutaneous tissue. The measured impedance of the body tissue is used to correlate with directly determined glucose levels to determine the glucose level from the measured impedance. It is thus possible to determine body fluid glucose levels in a reliable and reproducible manner.

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